14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE.

10. DISTANCE FROM PROPOSED*

DISTARCE SEUM FRANCES
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any)

18 MILES NORTHWEST OF MACK, COLORADO

AND TO BERLERY OL	(Also to hearest drig, unit line, it day)			1 100 ACKES		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2236		1	76' MORRISON	20. BOTARY OR CABLE TOOLS ROTARY		
21. ELEVATIONS (Show w	hether DF, RT, GR, etc.)			22. APPROX. DATE WORK WILL START*		
5366' GI	₹			MAY 30, 1994		
23.		PROPOSED CASING A	ND CEMENTING PROGRA	AM .		
SIZE OF HOLE	BIZE OF CASING	WEIGHT PER FOOT	BETTING DEPTH	QUANTITI OF CEMENT		
11"	8 5/8''	24#	30σ	150 sx 'G' + 3% CaCl vld:1		
6 1/4"	4 1/2"	10.5#	35.76'	175 sx 10-0 Thixotropic		
				yld: 1.6		

16. NO. OF ACRES IN LEABE

1280 ACRES

IN ADOVE STACE DESCRIBE PROTOSED PROGRAM : If proposed is to despen or plug back, give data on present productive some and proposed new productive ly of deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout zone. If proposal to preventer program 24. DATE May <u>Petroleum Engineer</u> #10 NED (This space for Federal or State office use) PERMIT NO APPROVAL DATE Associate District Manager TITLE

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A Dated 1/1/80

CONDITIONS OF APPRICIONAL ATTACHE

NENW SEC 12-T17S-R25E

UTAH

12. COUNTY OR PARISE | 18. STATE

160 ACRES

GRAND

NO. OF ACRES ASSIGNED

TO THIS WELL

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

LONE MOUNTAIN PRODUCTION COMPANY

1622 16 Road Loma, CO 81524 Phone & Fax (303) 858-7546 Mobile (303) 244-6238

May 6, 1994

Ron Firth
State of Utah
Dept. of Natural Resources
Division of Oil, Gas, & Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180



RE: APPLICATION FOR PERMIT TO DRILL

Bar-X Federal #19 NWSW Sec. 11-T17S-R25E Grand County, Utah Bar-X Federal #21 NENW Sec. 12-T17S-R25E Grand County, Utah

BMG Federal #9 NENE Sec. 17-T16S-R26E Grand County, Utah

Dear Ron:

Enclosed please find the APDs to drill the above referenced wells. We plan to do this work in mid May to mid June.

If any further information is needed please call me at (303) 858-7546.

Very truly yours,

Lone Mountain Production

Joe Dyk

Petroleum Engineer

Enclosure

Form 3160-3 (November 1983) (formerly 9-331C)

UNITED STATES DEPARTMENT OF THE INTERIOR

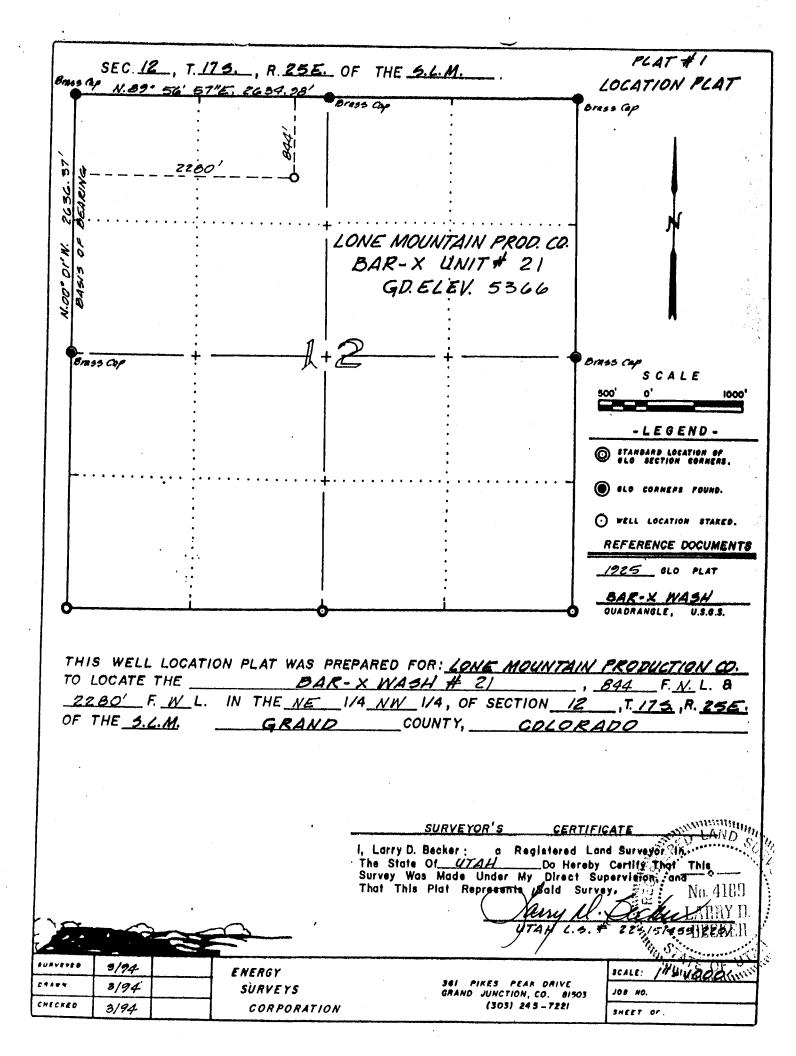
SUBMIT IN PLICATE*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

	DEPARTMEN	I OF IME I	NIERIO	rK			5. LEASE DESIGNA	TION A	ND SERIAL NO.
	BUREAU OF	LAND MANA	GEMENT				SLC-064		7
APPLICATION	ON FOR PERMIT	TO DRILL.	DEEPEN	OR PI	UG B	ACK	6. IF INDIAN, ALL		R TRIBE NAME
1a. TYPE OF WORK	RILL X	DEEPEN			IG BAC		N/A 7. UNIT AGREEME	NT NAI	(B
b. TYPE OF WELL OIL WELL	OAS WELL OTHER		SINGLE Zone	<u> </u>	MULTIPL Zone	• 🗆	BAR X 8. FARM OR LEASI	B NAME	1
	OUNTAIN PRODUCT	TION COMPA	ANY				FEDERAL 9. WELL NO.		
3. ADDRESS OF OPERATOR 100 N 2	7TH. SUITE 450). BILLIN	GS. MT	5910	3		NO. 21		WILDCAT
4. LOCATION OF WELL At SUFFACE	(Report location clearly and	in accordance wi	th any State	requiremen	its.*)	-	BAR X	. OR RL	
844 FN At proposed prod. : SAME	IL 2280' FWL						11. SEC., T., R., M. AND SURVEY O		
	s and direction from nea S NORTHWEST OF)		-	12. COUNTY OR PA	RISH	UTAH
15. DISTANCE FROM PRILOCATION TO NEAR PROPERTY OR LEAS (Also to nearest d	EST	4 '	16. NO. OF		LEASE		F ACRES ASSIGNED IS WELL 160 A	CRES	3
18. DISTANCE FROM PE	OFOSED LOCATION* DRILLING, COMPLETED.	36 '	19. PROPOS	ED DEPTH	SON		TARY	-	
21. ELEVATIONS (Show 5	whether DF, RT, GR, etc.)				,		MAY 30		
23.		PROPOSED CASI	ING AND CE	MENTING I	PROGRAM		<u> </u>		
SIZE OF HOLE	BIZE OF CABING	WEIGHT PER F	00Т	SETTING DE	РТН		QUANTITY OF C	EMENT	
11''	8 5/8"	24#		300'		150 s	x 'G' + 3'	% Ca	aCl yld:1.
6 1/4"	4 1/2"	10.5#		3576'		175 s			ropic
						y1d			

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout zone. If proposal preventer program if any DATE May TITLE Petroleum Engineer SIGNED for Federal or State office use) (This space APPROVED BY THE STATE PERMIT NO. APPROVAL DATE APPROVED BY TITLE CONDITIONS OF APPROVAL, IF ANY: *See Instructions On Reverse Side WELL SPACING



Application for Permit to Drill Bar-X Unit No. 21 NENW Section 12-T17S-R25E Grand County, Utah

- 1. Surface formation is the Mancos.
- 2. Anticipated Geologic markers are: Mancos at surface, Dakota Silt 3026', Dakota 3111', Morrison 3226'.
- 3. Gas is anticipated in the Dakota and Morrison. No oil or other minerals are anticipated. No water sands are expected.
- 4. Proposed casing program: See item no. 23
- b. Pressure control equipment: See Attached Well control plan and schematic of contractor's BOP stack. BOP's Will be tested before drilling out from under surface casing and checked daily.
- 6. Air or mist drilling will be used to drill the surface hole unless water is encountered. If water is encountered, chemical-gel mud will be used. The well will be air drilled from under surface casing to total depth.
- 7. Auxiliary equipment: See Well Contol Plan.
- 8. The logging program will consist of a DIL log from total depth to base of surface casing and GR-FDC-CNL logs on the bottom 1000 feet. No cores or drill stem tests are planned.
- 9. No abnormal pressures or temperatures are anticipated. No poisonous gas is anticipated.
- 10. Anticipated spud date is May 30, 1994. Completion operations should commence within 30 days of rig release.
- 11. Survey plats are attached.
- 12. The gas is not dedicated at this time.
- 13. Lone Mountain Production Company's Statewide Bond Number is: 070719
- 14. The completion program will be designed after the logs have been evaluated.

WELL CONTROL PLAN

- 1. Surface casing: 8-5/8" O.D., 24.0#, STC, J-55 casing set at 300' and demented back to surface with 150 sx Standard dement + 3% CaCl2 (yield=1.19 ft3/sk; compressive strength= 650 psi in 6 hours).
- 3. Casinghead Flange: 8-5/8" x 4-1/2" 500 series casinghead with two 2", 2000ps: b.F. outlets.
- 4. Blowout Preventer: The rid is equipped with a 10" 3000 psi W.P. double gate hydraulic Sharter BOP (or equivalent) with drill pipe rams and blind rams to meet requirements for a 2000 psi stack in Onshore Order No. 2. All fill, kill and choke lines will be a minimum of 2" 2000 psi W.P. A Grant rotating head will be used while air and mist drilling. A new rubber will be installed before drilling through the Dakota. BOP's will be worked daily. Blind rams will be checked during trips. BOP's will be tested to 2000 psi but not more than 70% of casing burst pressure (2065 psig) prior to drilling the shoe joint.
- 5. Auxiliary Equipment: (a) Drill pipe floats will be allowed at contractor's discretion. (b) Visual monitoring of air returns will be maintained. (c) Upper kelly cock will be used. (d) Stabbing valve will be kept on the floor.
- 6. Anticipated bottom hole pressure is less than $800~\rm psi$ at $35/6^{\circ}$ or $0.21~\rm psi/ft$. No abnormal temperatures or hydrogen sulfide gas are anticipated.

LONE MOUNTAIN PRODUCTION COMPANY

By:

り、 V./DYK. P.E.

SURFACE USE PLAN

Lone Mountain Production Company
Bar-X Unit No. 21
NENW Section 12-T178-R25E
Grand County, Utah

.....

1. EXISTING ROADS

see Maps #1 and #2 and Plat #1. This proposed well is located approximately 17 miles northwest of Mack, Colorado. It is reached by going west on Old Highway 6&50 8.8 miles to 2 Road. Turn right and go 4.2 miles to the State line fence road. Turn to the right and go 3.0 miles north. Turn left and go 2.3 miles. Turn right and go 0.7 miles. Turn right on new road and go 0.1 miles to location.

2. ACCESS ROADS TO BE CONSTRUCTED

The proposed 600 feet of access road will be constructed with an 18 foot travel width. Total disturbance width will be 30 feet. All of the proposed access road is within the Unit boundary. A cultural survey was performed along the entire route. See Map #1 and Plat #2.

The topsoil will be windrowed on the north side of the road.

3. LOCATION OF EXISTING WELLS

 9 producing wells and 1 dryholes are within one mile radius. See Map #3.

4. LOCATION OF PRODUCTION FACILITIES

See Plat #5. Every thing will be painted pinyon green.

5. LOCATION AND TYPE OF WATER SUPPLY

The source of water for this well is west Sait Creek. The pickup point is on old highway 6 & 50 out 2.5 miles west of Mack, Colorado.

6. SOURCE OF CONSTRUCTION MATERIALS

No construction materials will be used other than native materials. Soil from cuts will be used in tills. No outside material will be brought in. Only upon completion will outside material be brought in if deemed necessary for production operations.

7. METHODS FOR HANDLING WASTE MATERIAL

Cuttings will be buried in the reserve pit at cleanup. Garbage and other waste material will be contained in a trash cage. This cage will be dumped at an approved sanitary landfill. Human waste will be contained in chemically treated sanitary porta-potties.

Drilling finids will be contained in the reserve pit and left to evaporate. Any fluids produced during testing operations will be collected in a test tank. If a test tank is not available, the fluids will be contained in the reserve pit. Any spills of oil, gas, saltwater, or noxious fluid will be cleaned up and removed.

If the well is productive, produced water will be disposed of on site for 30 days only or 90 days with the permission of the State Petroleum Engineer. After that time application will be made for approval of permanent disposal method in compliance with the rules and regulations of the State of Utah and onshore order no. 7.

8. ANCILLARY FACILITIES

A 3" welded steel surface pipeline will be layed across to the Bar-X Unit No. 20 well approximately 2400 feet south east of the No. 21 well. An arch clearance will be performed when the well is completed. The pipeline will be constructed after a sundry notice has been submitted.

9. WELLSITE LAYOUT

See Plat #2 - Pit and Pad Davout See Plat #3 - Cross Sections of Pit and Pad See Plat #4 - Rig Davout

The location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and production equipment.

Topsoil will be stripped to a depth of 4 inches and stockpiled on the north edge of the location. No topsoil stripping will be done when soils are moisture saturated to a depth of 3 inches, or frozen below the stripping depth.

The reserve pit will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished. Fencing will be four strands of barb wire or 48 inch woven wire with one strand of barb wire above the woven wire. All corners will be braced. The fence construction will be on cut or undisturbed surface. A dirt bank will be constructed on the north end of the reserve.

to contain dust from the blooie line.

All construction activities will be contined to the minimum area necessary. The exterior boundaries of the construction area will be clearly flagged prior to any surface disturbing activities or vegetation removal.

Lone Mountain Production Company will clear all brush prior to construction. Brush will be stock piled on the northeast and southwest edges of the location and will be kept separate from the soil stock piles. The brush will be used for mulch after the disturbed area has been seeded.

10. PLANS FOR RECLAMATION OF THE SURFACE

A biodegradeable mulch may be required it soil erosion or vegetation establishment is determined to be a problem by the authorized officer on the access or location reclamation.

All disturbed areas will be seeded with the approved seed mixture. Application rates are for pure, live seed (PLS). Seed tags will be submitted to the area manager within 30 days of seeding.

Lone Mountain will prepare seedbed by contour cultivating 4 - 6 inches deep and drilling seed 1/2 to 1 inch deep tollowing the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and covered 1/2 to 1 inch deep with a harrow or drag bar.

Seeding will be completed after August 15/September 1 and prior to October 1 of the fall of 1994, if feasible, but not later than the fall of 1995.

It the well is a producer:

Lone Mountain will upgrade and maintain access roads as necessary to prevent soil erosion and accomodate year-round traffic. Lone Mountain will reshape areas unnecessary to operation, rip or disk on the contour, and seed all disturbed areas outside the work area according to the above seed mixture. The top soil will be saved for use during final reclamation unless the site can be recontoured to blend with the natural topography as required for final abandonment. Perennial vegetation will be established. Additional work will be required in case of seeding failures. All permanent facilities placed on the placed on the location will be painted dark green to blend with the natural environment.

If the well is abandoned/dryhole:

Lone Mountain will restore the access road and location to blend with the natural topography. During reclamation of the site, till material will be pushed into cuts and up over the backslope. No depressions will be left that could trap water or torm ponds. Topsoil will be distributed evenly over the location and seeding according to the above seed mixture. The access road and location will be ripped or disked prior to seeding.

The area is considered to be satisfactorily reclaimed when:

- A) Soil erosion resulting from the operation has been stabilized.
- B) A vegerative cover at least equal to that present prior to disturbence and a plant species composition at least as desireable as that present prior to disturbance has been established. Establishment of seeded species in the approved seed formula will be considered as acceptance.

Additional work will be required until these conditions are satisfied.

11. SURFACE OWNERSHIP

All lands involving new construction are federal lands.

12. OTHER INFORMATION

Lone Mountain will contact the Grand Resource Area Manager at least 24 hours prior to commencing construction or maintenance of the access road and well pad.

Lone Mountain will immediately bring to the attention of the Grand Resource Area Manager any and all antiquities or other objects of historic or prehistoric ruins, artifacts, or tossils discovered as a result of operations under this permit. Lone Mountain will immediately suspend all activities in the area of the object and will Leave such discoveries intact until told to proceed by the Area Manager. Notice to proceed will be based too to attraction of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Area Manager from a federal agency insofar as practical. When not practical, Lone Mountain will follow the mitigation requirements set forth by the Area Manager concerning protection, preservation, or diposition of any sites or material discovered. In those situations where the Area Manager determines that data recovery and/or salvage excavations are necessary, Lone Mountain will bear the cost of such data recovery and/or salvage operations.

The Grand Resource Area Manager will be notified at least 24 hours prior to commencing reclamation work.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVES AND CERTIFICATION

James G. Routson
Lone Mountain Production Company
P.O. Box 3394
Billings, Montana 59103
Ottice Phone: 406-245-507/
Home Phone: 406-245-8/97

Joe Dyk
Lone Mountain Production Company
1360 Hwy 6&50
Loma, Colorado 81524
Office Phone: 303-858-7546

Home Phone: 303-858-0536 Mobile phone: 303-244-6238

I hereby certify that I, or persons under my supervision, have inspected the proposed drillsite and access route; that I am tamiliar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Lone Mountain Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

May 2, 1994

Joe byk, P.E.

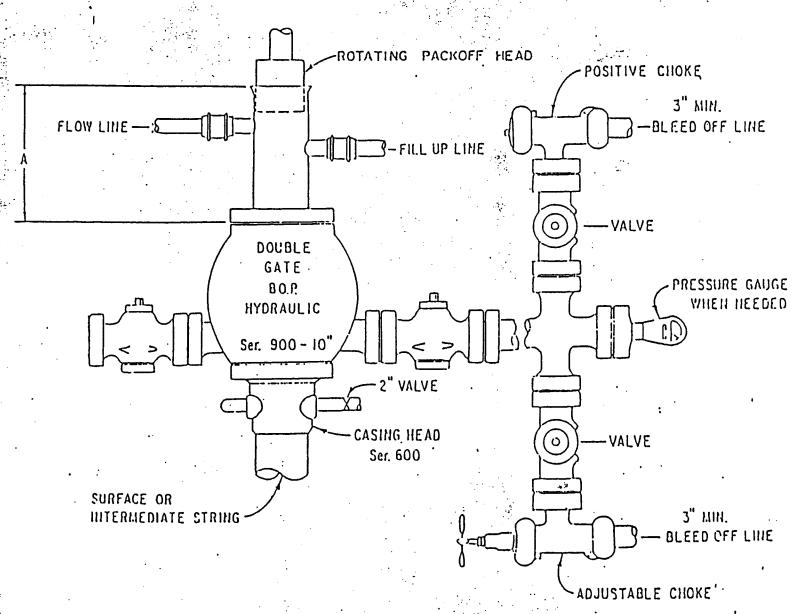
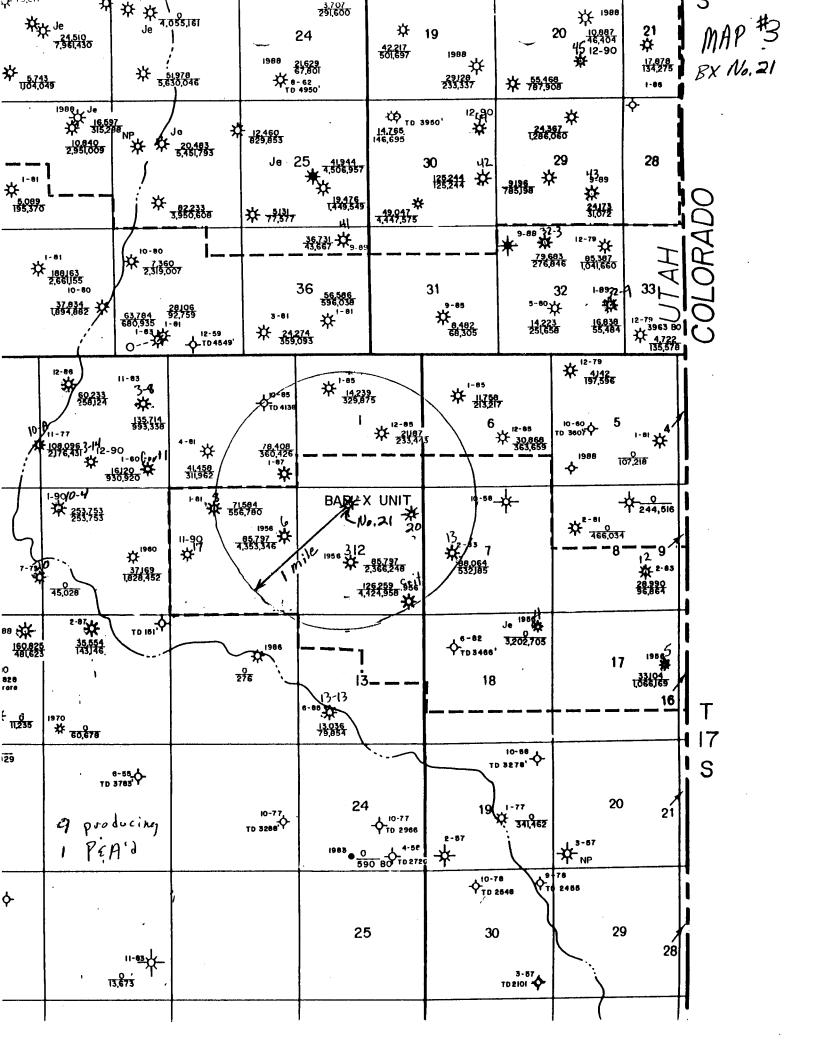
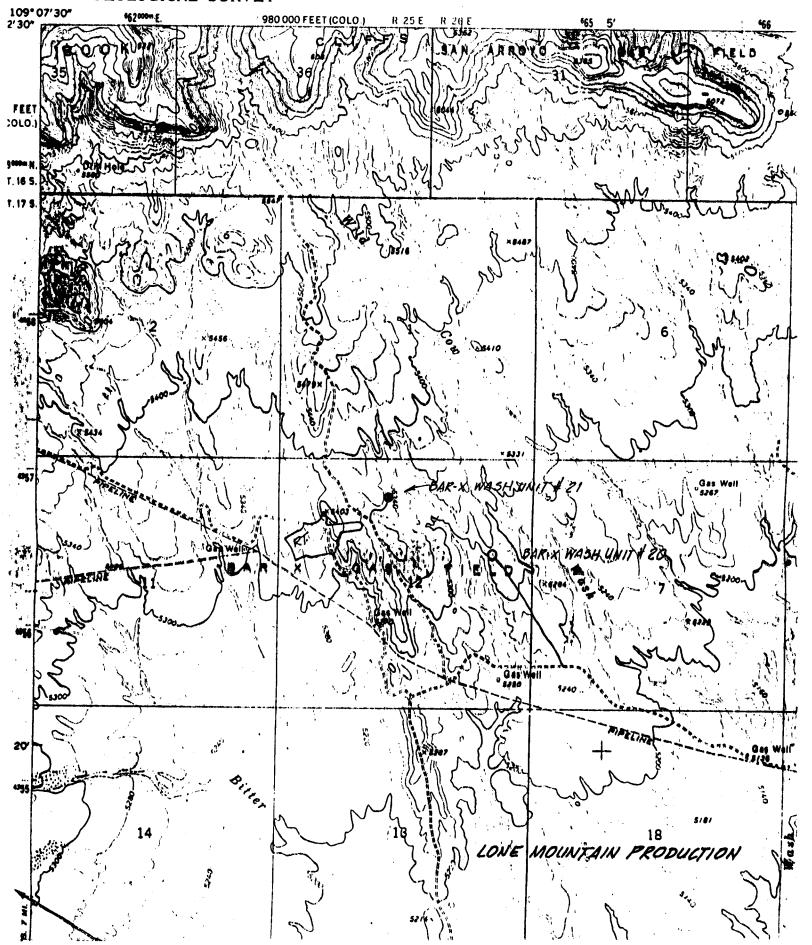
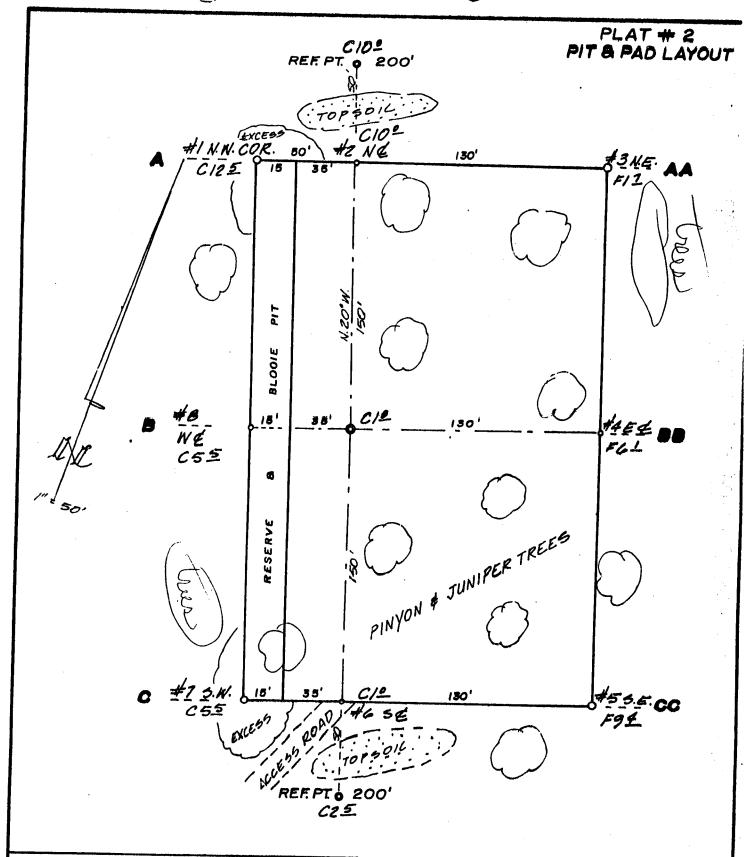


EXHIBIT I
BLOWOUT PREVENTER DIAGRAM



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

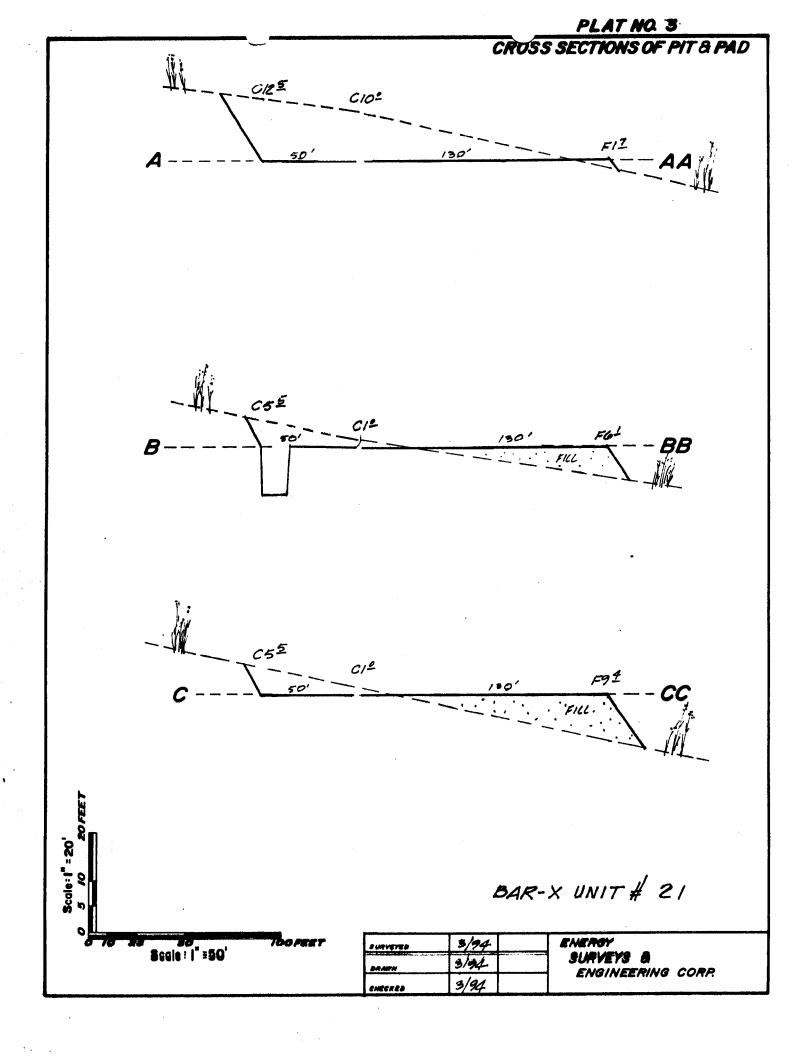




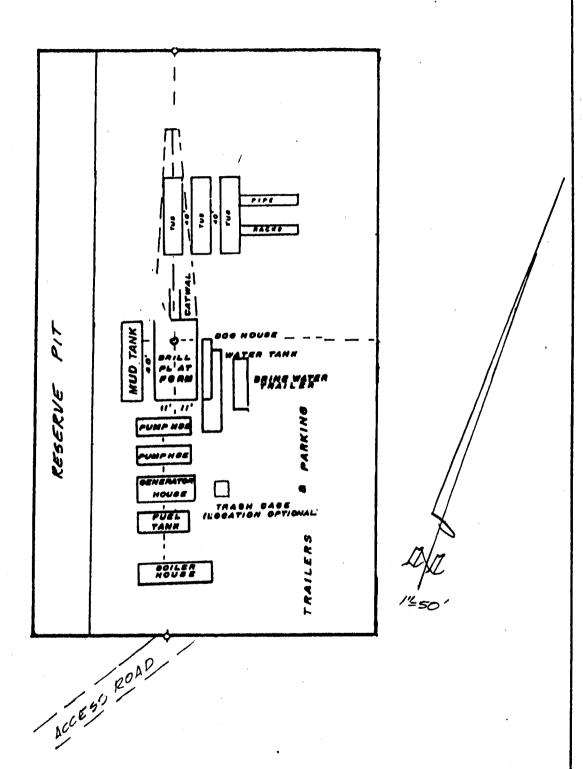
	ESTIMATE	DOIRT	QUANTITIES	;
ITEM	CUT	FILL	TOPBOIL	
PAD	4790	3522	1200	
PIT	1500			
TOTAL	6290	3522	1200	1568
=				

ENERGY SURVEYS CORP. GRAND JUNCTION, COLORADO

BAR - X UNIT # 2/
LONE MOUNTAIN PRODUCTION



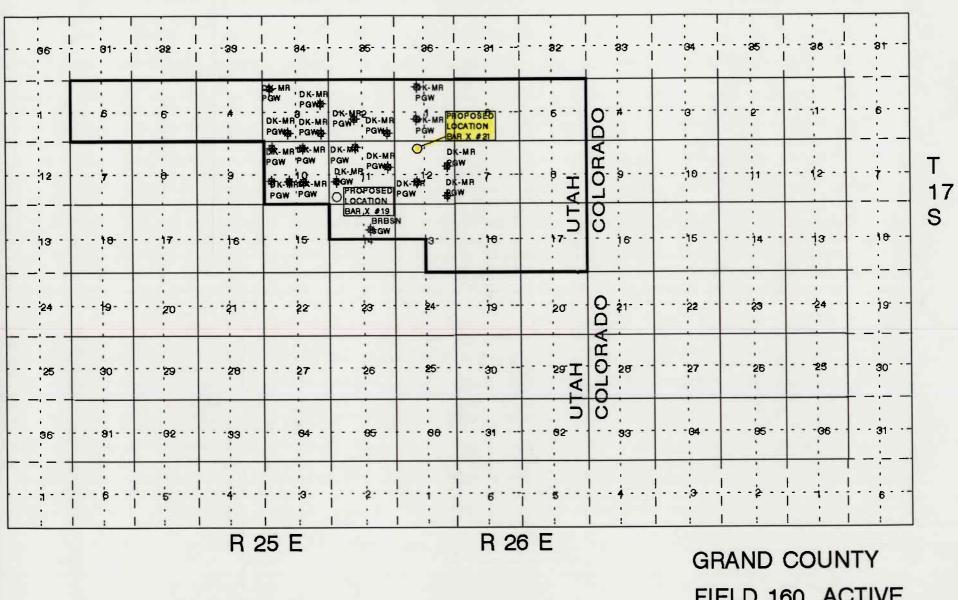
PLAT # 4 RIG LAYOUT



LONE MOUNTAIN PRODUCTION
BAR-X UNIT # 21

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 05/10/94	API NO. ASSIGNED: 43-019-31352						
WELL NAME: BAR-X FEDERAL 21 OPERATOR: LONE MOUNTAIN PRODUCTION (N7210)							
PROPOSED LOCATION: NENW 12 - T17S - R25E SURFACE: 0844-FNL-2280-FWL BOTTOM: 0844-FNL-2280-FWL GRAND COUNTY BAR X FIELD (160) LEASE TYPE: FED LEASE NUMBER: SLC-064806 PROPOSED PRODUCING FORMATION: DKTA	INSPECT LOCATION BY: / / TECH REVIEW Initials Date Engineering Geology Surface						
RECEIVED AND/OR REVIEWED: Y Plat Y Bond: Federal[Y State[] Fee[] (Number	LOCATION AND SITING: R649-2-3. Unit:						
COMMENTS: STIPULATIONS: 1. WATER PERMIT A							
BY SUNDRY PRIOR TO SPUD							



FIELD 160 ACTIVE

Form 3160-3 (November 1983) (formerly 9-331C)

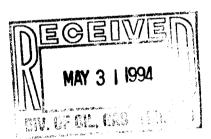
UM TED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN TRUTTICATE*

(Other instruc s on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

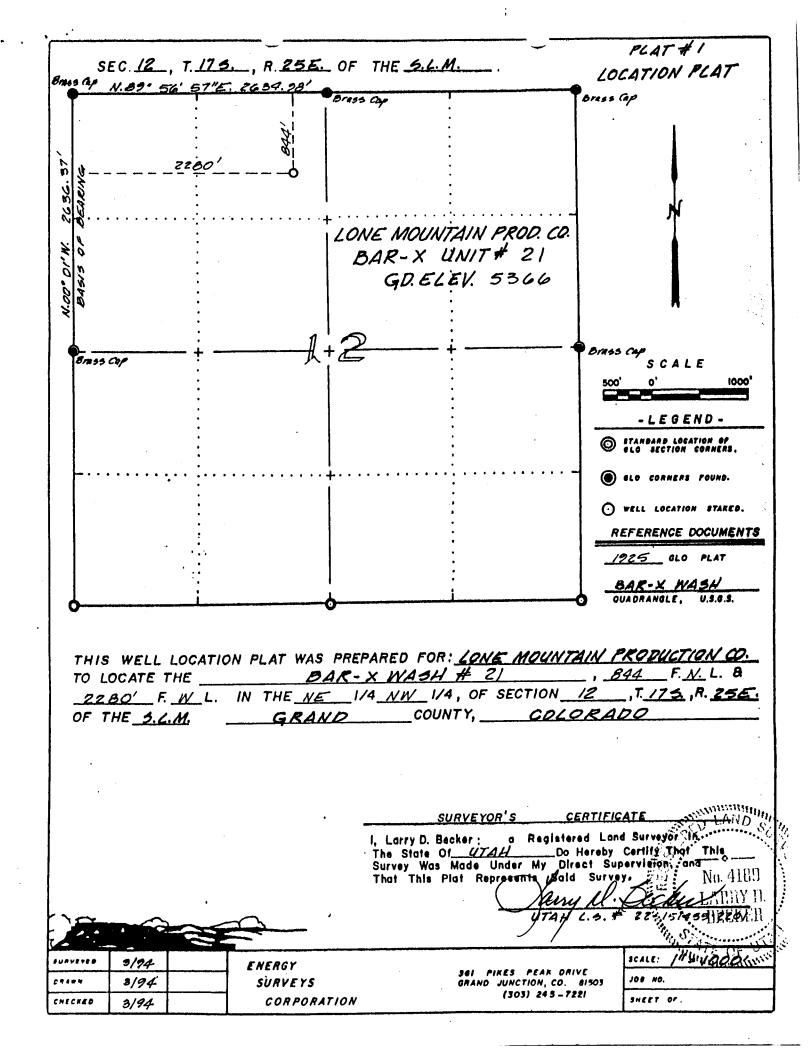
DEPARTMENT OF THE INTERIOR							5. LEASE DESIGNATION	AND SERIAL NO.
	BUREAULOF	LAND MANAC	SEMEN	T			SLC-06480	6
APPLICATION	FOR PERMIT,	O DRILL, I	DEEPE	N. OR	PLUG B	ACK	6. IF INDIAN, ALLOTTE	OR TRIBE NAME
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2. NAME OF OPERATOR	10	***					FEDERAL	
LONE MOU	NTAIN PRODUCT	ION COMPA	ANY				9. WELL NO.	
3. ADDRESS OF OPERATOR							NO. 21	-
100 N 27	TH, SUITE 450), BILLING	GS, N	IT 59	103		10. FIELD AND POOL, O	OR WILDCAT
4. LOCATION OF WELL (Re At surface	eport location clearly and	in accordance wit	th any S	tate requires	nents.")		BAR X	
844' FNL	2280' FWL						11. SEC., T., R., M., OR AND SURVEY OR AI	BLK. Rea
At proposed prod. zon SAME							NENW SEC 12	
	AND DIRECTION FROM NEAR						12. COUNTY OR PARISH	
18 MILES	NORTHWEST OF	MACK, CO	OLORA	ADO			GRAND	UTAH
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig	INE. FT. 844	, '		OF ACRES			of acres assigned HIS WELL 160 ACR	ES
18. DISTANCE FROM PROP	OSED LOCATION*			POSED DEPT		20. ROTA	ROTARY OR CABLE TOOLS	
TO NEAREST WELL, DO OR APPLIED FOR, ON THE	IS LEASE, FT. 223	36'	3576	5' MOR	RISON	RO	TARY	
21. ELEVATIONS (Show who			.i				22. APPROX. DATE WO	ORK WILL START
5366' GR							MAY 30, 1	994
23.		PROPOSED CAS	ING AND	CEMENTI	G PROGRAM	A		
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6 1/4"	4 1/2"	10.5#		357	6'		\times 10-0 Thix	otropic_
						y1d	i: 1.6	
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							The second residence of the se	



IN ABOVE SPACE DESCRIPTION. If proposal of a	o drift of deepen directionally, give per	o deepen or plug back, give data on present productive tinent data on subsurface locations and measured and t	sone and proposed new productive true vertical depths. Give blowout
SIGNED SIGNED		TITLE Petroleum Engineer	DATE May 2, 1994
(This space for Fed	ieral or State office use)		
PERMIT NO.		APPROVAL DATE	
APPROVED BY	/S/ WILLIAM C. STRINGER	Associate District Manager	DATE 30
CONDITIONS OF APPRO			A ATTACHEL
FLARING OR VEN	TING OF	CONDITIONS OF APPRO	MAL ATTAUME!
GAS IS SUBJECT Dated 1/1/80	10 NTI 4-A	Instructions On Reverse Side	

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Lone Mountain Production Company Bar-X Federal No. 21 Lease SL-064806 NW/NE Section 12, T17S, R25E Grand County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Lone Mountain Production Company is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT 0719 (Principal - Lone Mountain Production Company) via surety consent as provided for in 43 CFR § 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR § 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR § 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. DRILLING PROGRAM

- 1. This action requires concurrent approval from the State of Utah, Division of Oil, Gas and Mining (DOGM). This location is not in a spacing "window" as defined in the Utah General Spacing Order.
- 2. The proposed 2M BOP system is adequate. The BOP system shall be maintained and tested in accordance with Onshore Oil and Gas Order No. 2.
- 3. If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

B. SURFACE USE PLAN

- 1. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer. Within five working days the authorized officer will inform the operator as to:
 - whether the materials appear eligible for the National Register of Historic Places;
 - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
 - a timeframe for the authorized officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the authorized officer are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the authorized officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The authorized officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the authorized officer that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. The use of water from West Salt Creek (Mesa County, Colorado) has been identified as a water depletion to the Colorado River and potentially affecting the T&E fish species. The impacts from the depletion will be offset with the one-time contribution of \$12.34 per acre-foot of water to:

National Fish and Wildlife Foundation The Bender Building 1120 Connecticut Avenue, N.W. Washington, D.C. 20036 Payments should be accompanied by a cover letter that identifies the project and biological opinion that is requiring the payment, the amount of the payment enclosed, check number, the balance of payment still due, the name and address of the payor, the name and address of the BLM office authorizing the project, and the address of the FWS office issuing the biological opinion. This information will be used by the Foundation to notify the payor, the BLM, and FWS when payment has been received.

- 3. In order to protect deer winter range, no drilling will be allowed from December 1 through April 15. The limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation may be specified in writing by the authorized officer.
- 4. Surface disturbance and vehicular travel will be limited to the approved location and access route. Any additional area needed will be approved in advance.
- 5. Cross-country traffic will be suspended during periods of wet weather to reduce soil rutting and soil compaction.
- 6. The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling the drilling rig. If upgraded, the road must be maintained at these standards until the well is properly abandoned. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.
- 7. The reserve pit will be located in cut material, with at least 50% of the pit volume below original ground level.
- 8. To minimize the amount of fugitive dust and spray escaping from the blooie pit, the blooie line will be directed into a sloped bank of subsoil.
- 9. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6. When the well is abandoned, the abandonment marker must be at least four feet above restored ground level and must be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).
- 10. At the end of drilling operations and prior to reclamation of the reserve pit, the fourth side of the pit will be fenced and the top of the pit will be covered with netting of one inch or less to prevent access by birds.

- 11. In the event the well pad or road is graveled or surfaced, the material will be removed prior to recontouring the surface for rehabilitation.
- 12. Prior to the installation of a pipeline, a Sundry Notice and map of the pipeline route will be submitted to determine if additional cultural resource inventories would be needed. No pipeline installation will be authorized until appropriate Sundry Notices or Rights-of-way are approved by BLM.

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

<u>Building Location</u>- Contact the Resource Area, Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

<u>Spud</u>- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

<u>Daily Drilling Reports</u>- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

<u>Sundry Notices</u>- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR § 3162.3-2. Safe drilling and operating practices must be observed.

<u>Drilling Suspensions</u>- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the District Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

<u>Undesirable Events</u>- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

<u>Cultural Resources</u>- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

<u>First Production</u>- Should the well be successfully completed for production, the District Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Resource Area Office. The Resource Area Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR § 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the District Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

<u>Produced Water-</u> Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted to the District Office for approval pursuant to Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the District Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

<u>Plugging and Abandonment</u>- If the well is completed as a dry hole, plugging instructions must be obtained from the District Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Office within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR § 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

NOTIFICATIONS

Notify Rich McClure or Jack Johnson of the Grand Resource Area in Moab, Utah, at (801) 259-8193 for the following:

- 2 days prior to commencement of dirt work, construction and reclamation;
- 1 day prior to spudding;
- 3 hours prior to testing BOPE

If the person at the above number cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, contact the person listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer

Office: (801) 259-6111

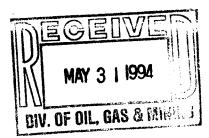
Home: (801) 259-2214

Form 3160-3 (November 1983) (formerly 9-331C)

SUBMIT IN ""UPLICATE. (Other int tions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

	SLC-06480							
APPLICATION 18. TYPE OF WORK DRI	LL W NAY OTHER	ACK	N/A 7. UNIT AGREEMENT					
b. TYPE OF WELL OIL G/W WELL W 2. NAME OF OPERATOR	ELEN XI AU CTOTHER	West of the second	8IN ZON		MULTIPL ZONE	<u> </u>	BAR X 8. FARM OR LEASE N. FEDERAL	AME
LONE MOUL	LONE MOUNTAIN PRODUCTION COMPANY							
100 N 27	TH, SUITE 450						NO. 21 10. FIELD AND POOL, BAR X	OR WILDCAT
At surface	2280' FWL		-	•			11. SEC., T., E., M., OR AND SURVEY OR	Area
SAME 14. DISTANCE IN MILES A							NENW SEC 12	H 13. STATE
15. DISTANCE FROM PROPULOCATION TO NEAREST PROPERTY OR LEARE L	NE. FT. 844		16. No.	OF ACRES IN I	LEASE		GRAND OF ACRES ASSIGNED HIS WELL 160 ACR	UTAH
(Also to nearest drig 18. DISTANCE FROM PROP TO NEAREST WELL, DI OR APPLIED FOR, ON THI	DEED LOCATION*	6'		ACRES POSED DEPTH MORRI	SON		RY OR CABLE TOOLS	TINES
21. ELEVATIONS (Show when 5366' GR	ther DF, RT, GR, etc.)						MAY 30,]	
23.		PROPOSED CASI	NG AND	CEMENTING I	PROGRAM			
SIZE OF HOLE	BIZE OF CASING	WEIGHT PER FO	ют	SETTING DE	PTH	· • • • • • • • • • • • • • • • • • • •	QUANTITY OF CEMI	
11" 6 1/4"	8 5/8" 4 1/2"	24# 10.5#	-	300 ⁻¹ - 3576 ⁻		150 s 175 s y1c	x 10-0 Thix	CaCl yld:1



/morosed program: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout zone. If proposal preventer program 24. TITLE Petroleum Engineer (This space for Federal or State office use) 43-019-3/352 /S/ WILLIAM C. STRINGER Associate District Manager APPROVED BY CONDITIONS OF APPROVAL, IF ANY: CONDITIONS OF APPROVAL ATTACHER FLARING OR VENTING OF

GAS IS SUBJECT TO NTL 4-A Dated 1/1/80

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

8355 West North Temple
3 Triad Center, Suite 350
Sait Lake City, Utah 84180-1203
801-538-5340
801-358-3940 (Fax)
801-538-5319 (TDD)

June 1, 1994

Lone Mountain Production Company 100 North 27th, Suite 450 Billings, Montana 59103

Re: Federal #21 Well, 844' FNL, 2280' FWL, NE NW, Sec. 12, T. 17 S., R. 25 E., Grand County, Utah

Gentlemen:

Pursuant to Utah Code Ann.§ 40-6-18, (1953, as amended), Utah Admin. R. 649-2-3, Application of Rules to Unit Agreements and R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

- 1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules.
- 2. Notification to the Division within 24 hours after drilling operations commence.
- 3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
- 4. Submittal of the Report of Water Encountered During Drilling, Form 7.
- 5. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.



Page 2
Lone Mountain Production Company
Federal #21 Well
June 1, 1994

6. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-019-31352.

Sincerely,

Associate Director

ldc

Enclosures

cc: Grand County Assessor

Bureau of Land Management, Moab District Office

WOI1

DIVISION OF OIL, GAS AND MINING

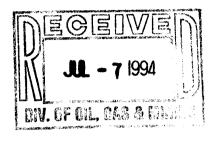
SPUDDING INFORMATION

NAME OF COMPANY: LONE MOUNTAIN	PRODUCTION	
WELL NAME: BAR X UNIT 21		
API NO. 43-019-31352		
Section 12 Township 17S	Range2	SE County GRAND
Drilling Contractor VECO		
Rig #		
SPUDDED: Date 7/1/94		
Time_EVENING		
How_ROTARY_	-	
Drilling will commence		
Reported by JOE DIKE		
Telephone #		
Date7/1/94	SIGNED	FRM

LONE MOUNTAIN PRODUCTION COMPANY

Mailing Address: P.O. Box 3394 Billings, MT 59103-3394 (406) 245-5077 FAX 248-6321 Shipping Address: 100 North 27th Street Suite 450 Billings, MT 59101

July 5, 1994



State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180
Attn: Mr. Frank Matthews

RE:

Entity Action Form - Form 6

Bar-X Federal No. 21

NENW Sec. 12, T17S-R25E

Grand County, Utah

Dear Frank,

Enclosed please the Entity Action Form - Form 6 for the referenced well indicating notice of spud. If you have any questions, please call.

Very truly yours,

LONE MOUNTARY PRODUCTION COMPANY

williamus, Lioya

Enclosure cc: Joe Dyk

STATE OF UTAH DIVISION OF OIL, GAS AND MINING ENTITY ACTION FORM - FORM 6

OPERATOR Lone Mountain Production Company

OPERATOR ACCT. NO. N 7210

ADDRESS P. O. Box 3394

Billings, MT 59103

EFFECTIVE DATE
7/2/94
,
1

,

ACTION CODES (See instructions on back of form)

A - Establish new entity for new well (single well only)

B - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

D - Re-assign well from one existing entity to a new entity

, NOTE: Use COMMENT section to explain why each Action Code was selected.

E - Other (explain in comments section)

JL - 7 1994

7/5/94 President

Title

Phone No. (406) 245-5077

(3/89)

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR RURFALL OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5 Lease Designation and Serial No SLC-064806

Non-Routine Fracturing

Conversion to Injection

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Water Shut-Off

Dispose Water

SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE Bar-X I. Type of Well Oil Well 8. Well Name and No. Other Federal No. 21 2. Name of Operator 9. API Well No. Lone Mountain Production Company 43-019-31352 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area P. O. Box 3394, Billings, MT 59103-3394 Bar-X 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 844' FNL, 2280' FWL Sec 12: T17S-R25E Grand County, UT (NEなNWな) CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Notice of Intent Abandonment Change of Plans **New Construction** Recompletion

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Plugging Back

Casing Repair

Altering Casing

Other Status

Drilled 12-1/4" wellbore to 306'. Ran 8-5/8" casing to 306' and cemented to surface with 85 sx high gel and 30 sx Cl. G + 3% Cacl. Full returns

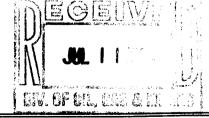
Drilled 7-7/8" wellbore to 3,576'. Ran E-logs. Log tops: Dakota Silt @ 3,034' (+2,348'); Dakota Sand @ 3,118' (+2,264'); Morrison @ 3,232' (+2,150')

Ran 4-1/2" casing to 3,568' and cemented w/225 sx of 10-0 thixotropic.

Rig released @ 8:15 p.m., 7/7/94.

Subsequent Report

Final Abandonment Notice



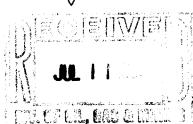
			of en, eas a main	
14. I hereby centry that the foregoing is true and dorrect Signed	Title	Petroleum Engineer	7-8-94	
(This space for Federal or State office use) Approved by	Title		Date	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

REPORT OF HATER ENCOUNTERED DURING DRILLING - FORM 7

1. Well name and numb API number: <u>43-01</u>	oer: <u>Bar-X Feder</u> 9-31352	al #21						
2. Well location: QQ	2. Well location: QQ NENW section 12 township 17S range 25E county Grand							
3. Well operator:Address:	Lone Mountain Prod P. O. Box 3394 Billings, MT 59103		phone: (406) 245-5077					
Address:	or: <u>Veco Drilli</u> P. O. Box 1705 Grand Junction, CO		phone: (303) 242-6912					
5. Water encountered	(continue on reverse s	de if necessa:	-y)					
Depth	Volume		Quality					
from to	(flow rate or		(fresh or saity)					
0 3576 '	None encountere	<u>d</u>						
		· · · · · ·						
	<u> </u>	<u>-</u>						
	 							
		·						
	,							
	<u> </u>							
6. Formation tops: _	Dakota Silt	3,034'						
·	Dakota Sand	3.118'	+2,264'					
·	Morrison	3,232'	+2,150'					
—		-						
If an analysis has be report to this form.	en made of the wat	er encounte	red, please attach a copy of the					
I certify that this r	eport is true and	complete to	the best of my knowledge.					
Name William B. Llo		Signature	Il May !					
Title <u>Petroleum Eng</u>	ineer	Date <u>7/8/94</u>	· · · · · · /-					

Comments:



Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

Expires: March 31, 1993

5 Lease Designation and Serial No

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals

SI = 064806 6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of 'Well Oil Gas Well Well Other	Bar X Unit 8. Well Name and No.
2. Name of Operator Lone Mountain Production Company	Federal No. 21 9. API Well No.
3. Address and Telephone No. P. O. Box 3394, Billings MT 59103 (406) 245-5077	43-019-31352 10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)	Bar X
844' FNL, 2280' FWL Sec 12: T17S-R25E (NE첫NW첫)	11. County or Parish, State Grand County, UT
CHECK APPROPRIATE ROY(s) TO INDICATE NATURE OF NOTICE REPO	DRT OR OTHER DATA

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Ouldiay surface pipeline	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
The state of the s		

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

A surface gas line will be laid from the Bar-X Unit No. 21 well to a tie in at the Bar-X Unit No. 20 well. The line will be 2 7/8", schedule 80, welded steel pipe. Minimal surface disturbance will occur. An archeological survey was performed by Grand River Institute and the flagged route designates the pipeline route as shown on the attached map. The approximate length is 2500'.

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

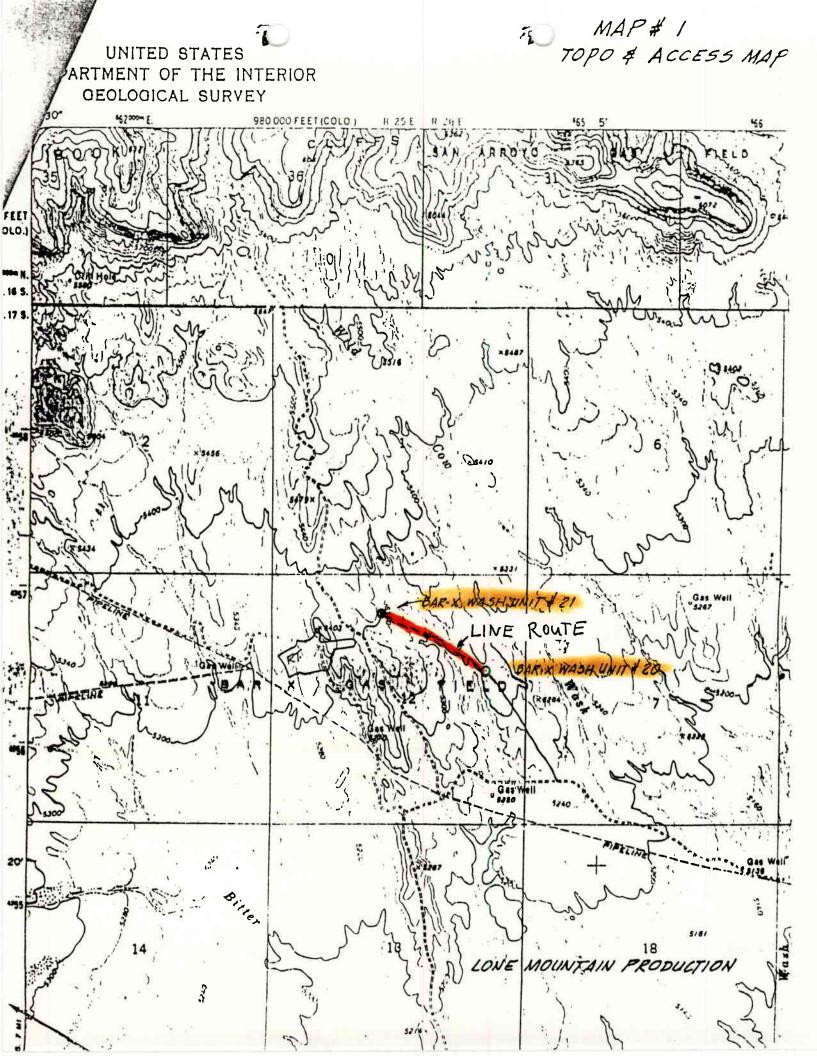
LOB RECORD ONLY

Accepted by the Oil, Gas and Mining



		to any constitution of the	State of the Control
14. I hereby certify that the foregoing is true and correct Signed	Title	Petroleum Engineer	8/5/94 Date
(This space for/Federal or State office use)	Title		Date
Approved by	I lue		Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

AUG 12

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

	I AND MANAGENER WAS THE STATE OF THE PARTY O	Carlo de de después de la contra del la contra del la contra del la contra del la contra de la contra de la contra de la contra del l
BUREAU OF	LAND MANAGEMENT	5. Lease Designation and Serial No
SUNDRY NOTICES	AND REPORTS ON WELLS	SLC-064806
		6 If Indian, Allottee or Tribe Name
	rill or to deepen or reentry to a different re	servoir.
Use "APPLICATION FO	OR PERMIT—" for such proposals	
CURIU	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
	TIN TRIPLICATE	
I. Type of Weil		Bar-X
Oil Gas Other		8. Well Name and No.
2. Name of Operator	· · · · · · · · · · · · · · · · · · ·	Federal No.21
Lone Mountain Producti	on Company	9. API Well No.
3. Address and Telephone No.		43-019-31352
P. O. Box 3394, Billin	gs, MT 59103-3394	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey I	Description)	Bar-X
844' FNL, 2280' FWL Se	c. 12: T17S-R25E	11. County or Parish, State
(NENE)		Grand County, UT
12. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE,	REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF A	ACTION
Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	X Other Completion	Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
	ll pertinent details, and give pertinent dates, including estimated dat cal depths for all markers and zones pertinent to this work.)*	e of starting any proposed work. If well is directionally drilled,
D	:::::::::::::::::::::	

Lone Mountain Production Company intends to complete the Bar-X Unit No. 21 as per the attached completion procedure.

We hope to commence operations on or about August 12, 1994.

Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

~ 1000				
14. I hereby certify that the foresting is the and correct Signed	Title	Petroleum Engineer	Date _	8-9-94
(This space for Federal or State office use) Approved by Conditions of approval, if any:	Tide		Date _	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

LONE MOUNTAI N PRODUCTION COMPANY Bar-X Federal #21 NENW S12, T17S-R25E Grand County, Utah Pagel

COMPLETION PROCEDURE

KB Elev.:

5382'

GL Elev.:

5366'

Casing Setting Depth:

3567.83'

cmt. w/225 sx 10-0 thixotropic

PBTD:

3523.28'

- MIRU completion unit. Unload, rack and tally 3500' of 2-3/8" tubing. NU BOP and frac spool and test.
- PU 3-1/2" bit and scraper on tubing and clean out to PBTD. Circ. clean. TOOH and LD bit and scraper. Swab well down to PBTD.
- RU wireline truck and run GR/CBL/VDL log from PBTD to 100' above cement top. Perforate Morrison w/2 jspf (0.40" dia.) at 3336'-40', 3345'-52', 3354'-59' and 3392'-95' (38 holes total. Select fire for bottom interval). Correlate to FDC/CNL log run dated 7/6/94. RD wireline and test rate up casing. If rate is more than 400 mcfd, proceed to step 5.
- 4 PU 1 jt. 2-3/8" tubing, retrievable tension packer, SN and tubing and TIH. Set packer at 3295'. Acidize Morrison perfs with 750 gals of 15% HCL. Drop 38, 1.1 s.g ball sealers after first 40 gallons and evenly spaced throughout remainder of job. Release packer and lower through perfs. Swab well to kick off and test. Test till rate stabalizes then SION for pressure buildup.
- POOH w/tubing and LD packer. RU wireline truck and lubricator. PU Elder model E-1 packer w/mechanical plug on wireline and run in and set at 3,320'. Dump 1 sk of sand on plug.
- 6 Perforate Dakota with 1 jspf (0.25" dia) as follows: 3141', 3150', 3192', 3194', 3195', 3220', 3225' and 3227'. RD wireline.
- PU 1 jt. 1-1/2" tubing w/mule shoe on btm, 1-1/2" x 2-3/8" cross over, 1 jt. 2-3/8" tubing, SN and 2-3/8" tubing. TIH and set EOT @ 3100'. Land with N-80 pup joint and blast joint on top. Frac Dakota interval w/20,000# 100 mesh and 80,000# 20/40 sand in 75 DHQ N_2 foam (triple entry). Frac at total rate of 33 BPM. Flow well back overnight to clean up.

LONE MOUNTAIN PRODUCTION COMPANY Bar-X Federal #21 NENW S12, T17S-R25E Grand County, Utah Page2

Test rate from Dakota. TIH w/tubing, circ. sand off plug w/well gas and knock out plug w/1-1-2" tubing. Land with 1-1/2" stinger approx. 1/2 way in plug. ND BOP and frac spool. NU tubing head and SWI for line connect.

Form 3160-4 "(November 1983) (formerly 9-330)

SUBNIT IN DUPLICATE

UNITED STATES

SUBMIT IN BUPER

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEME VIV. OF OIL, GAS'&'

Form approved. Budget Bureau No. 1004-0137 Expires August 31, 1985

1.EAS	E DES	IGNATION	AND	SERIA	L NO
SLC-	-064	806			
IF IN	DIAN.	ALLOTTE	OR	TRIBE	NAM

WELL CO	MPLETION	OR	RECO	MPLETI	ON F	REPOR	T AN	D LO	G*	6. IF INDIA	N, ALL	OTTEE OR TRIBE NAME
1a. TYPE OF WEL	.L: ott.		GAS WELL	X DR	v 🗌	Other				7. UNIT AGI	REEMEN	XT NAME
b. TYPE OF COM	PLETION:	or- [TT	erra j	DIEF.	П					S. FARM OR	, , , , ,	SAVE
NEW WELL Z	OVER L EN		BACK	RESV	R. L	Other				- S. PARM OR	FFYZI	4. F.
	iTAIN PRODU	CTION	COMD	ANV						9. WELL NO),	
3. ADDRESS OF OPE		CITON	COMP	<u> </u>				·····		FEDER/	AL NO	0. 21
P.O. BOX	3394 BIL	LINGS	, MT	59103				 				DL, OR WILDCAT
4. LOCATION OF WE	· •			accordance	with an	y State rec	quiremen	ta)*		BAR -		OR BLOCK AND SURVEY
84	4' FNL, 22	_								OR ARE		OR BLOCK AND BORYER
	terval reported be	elow Sa	me							SEC. 12	2:T1	7S,R25E
At total depth	Same						D	1001:95		12. COUNTY	0.0	13. STATE
				1 .	MIT NO.	1050	1	ISSUED		PARISH	O.	
5. DATE SPUDDED	16. DATE T.D.	EACHED	17. DAT	E COMPL. (019-3 Ready to	352 prod.)		-94	DF, RKI	GRAND B, RT, GR, ETC.)*	19.	ELEV. CASINGHEAD
7-2-94	7-6-94		8-8	20-94				383' KI				5366'
20. TOTAL DEPTH, MD			r.d., MD &	TVD 22.	IF MULT	TIPLE COM		23. INT			OLS	CABLE TOOLS
3576 1 24. PRODUCING INTER		521'	TION PO	B BORROW	NAME /2	D AND THE	n) *	<u> </u>	->	YES	1 9	25. WAS DIRECTIONAL
	RVAL(8), OF THIS		/ / / / / / / / / / / / / / / / / / /	r, BUTTUM,	M) setano.	AND IV	-,				1	SURVEY MADE
	227' DAKOT		(DK-	MR)								NO
6. TYPE ELECTRIC	AND OTHER LOGS	RUN					2//				27.	WAS WELL CORED
FDC/CNL/	GR DIL/GR			CBL/GR	<u> </u>	11-9						NO
S. CASING SIZE	WEIGHT, LB.	/p-p	CAS	ING RECO		ort all str	ings set		MENTI	NG RECORD		AMOUNT PULLED
	_		306			1/4"	10			. 30 sks'(AMOUNT PULLED
8 5/8" 4 1/2"	- 24 10.5		356			1/4 7/8"		25 sks			2	
7.72			000							<u> </u>		
				l				1 00		MUDING DE	1000	
SIZE	TOP (MD)	,	RECORD	SACKS CE	MENT*	SCREEN	(MD)	30.		TUBING REC		PACKER SET (MD)
	TOP (MD)	B01108	n (MD)	SACKS CE		50.00	(40)					
31. PERMORATION RE	cord (Interval, s	ize and 1	umber)			82.			r, FRA	CTURE, CEME		
15'-52 <u>' 33</u> 36	1-40° 0.4"	, 46	TOTAL				INTERVA		-			MATERIAL USED
	 					3141	- 3	5221	<u>535</u>	RBL SN2F UM	1, IU	M#100MESH80.M#2
-	50', 3192'					1			-			
3220', 32	25, 3227'	0.	3" , 8	Shots	Total							
33.*				Flowing, ga		OUCTION	ing and	tune of nu		1 991	C STAT	US (Producing or
DATE FIRST PRODUCT			•	r towing, ga	a ciji, pi	am proye	120 010	ype o, pu	<i></i> ,	ah	ut-in)	· -
8-19-94 DATE OF TEST	HOURS TESTED	LOWIN	G okr size	PROD'N		OIL-BE	L.	GASM	CF.	WATER-BI	-WOP	GAS-OIL BATIO
8-19-94	3	5	/8"	TEST I				188	.5			
PLOW. TUBING PRESS.	CASING PRESSU	RE CA1	CULATED HOUR RA	OILB	BI	GA	8			ERHBL.	OIL	GRAVITY-API (CORR.)
140 34. disposition of G	250	r tuel	nted atc	<u>, </u>			1508			TEST WITH	ESSED	BY
VENTED	rag (17 014, 195 54 /0	. ,		,								•
VENIED 35. LIST OF ATTACH	MENTS	20	1									
NONE	100											
36. I hereby certiff	that the foreign	ng and a	ttached	nformation	is comp	lete and o	orrect a	s determin	ned fro	om all available	record	ls .
SIGNED /	KAKN	MI	,	тіл	LE P	ETROLE	UM EN	IGINEEF	₹	DA1	re <u>9</u>	-6-94
		7.				1.10	1.5			2: 4.7		

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED Budget Bureau No. 1004-0135 Expires March 31, 1993

SUNDRY NOTICES Do not use this form for proposals to dr	AND REPORTS ON WELLS. CAS & MINING ill or to deepen or reentry to a different reservoir. R PERMIT—" for such proposals	5 Lease Designation and Serial No SLC-064806 6. If Indian, Allottee or Tribe Name	
SUBMIT 1. Type of Well Oil Well X Well Other	IN TRIPLICATE	7. If Unit or CA, Agreement Designation Bar-X 8. Well Name and No.	
2. Name of Operator Lone Mountain Productio 3. Address and Telephone No.	n Company	Federal No. 21 9. API Well No. 43-019-31352	
P. O. Box 3394, Billing 4. Location of Well (Footage, Sec., T., R., M., or Survey De 844 FNL, 2280 FEL Sec (NENE)	10. Field and Pool, or Exploratory Area Bar-X 11. County or Parish, State Grand County, UT		
2. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION		
Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Y Other Report of 1st Prod	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	
 Describe Proposed or Completed Operations (Clearly state algorithms and structure vertically). 	il pertinent details, and give pertinent dates, including estimated date of starting depths for all markers and zones pertinent to this work.)*	g any proposed work. It went is directionally drilled,	

The referenced well was place on production on September 2, 1994 at 10:30 a.m.. Production rate was 200 mcfd with 690 psi FTP and FCP

\mathcal{M}				
14. I hereby certify that the foregoing is true and correct Signed	Title	Petroleum Engineer	9-7-94 Date	
(This space for Federal of State office (se) Approved by Conditions of approval, if any:	Tide		Date	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

EQUIPMENT INVENTORY UTAH DIVISION OF OIL, GAS AND MINING STATE OF UTAH

Oper	stor: <u>LONE MOUNTAIN PROD</u> Lease: State: Fed	ieral: Y India	n: Fee:
Well	Name: FEDERAL #21	API Number: 4	3-019-31352
Sect.	ion: 12 Township: 178 Range: 25E County: GRAND	Field:	BAR X
Well	Status: PGW Well Type: Oil: Gas	s: <u>Y</u>	
PROD	UCTION LEASE EQUIPHENT: (NUMBER)		
	Boiler(s): N Compressor(s): N Separator(s): <u>Y</u> Dehydr	ator(s): <u>N</u>
	Shed(s): (2) Line Heater(s): N Heated :	Separator(s):_	YES VRU: N
	Heater Treater(s): N		
PUMP	3 <i>:</i>		
	Triplex: Chemical: Y Centrifugal:		
LIFT	HETHOD:		
	Pumpjack: N Hydraulic: N Submersible	le: <u>N</u> F1	owing: YES
GAS I	EQUIPMENT: (NUMBER)		
	Purchase Meter: N Sales Meter: Y		
TANK	3: NUMBER	SIZE	
	Oil Storage Tank(s): NO		BBLS
	Water Tank(s): YES		BBLS
	Power Water Tank:		BBLS
	Condensate Tank(s):		BBLS
	Propene Tank: NO		
Cent:	ral Battery Location: (IF APPLICABLE)		
	Otr/Otr: Section: Township: Rang	J# :	
REMA	RKS: BARTON SALES HETER WITH SHED. HEATED SE	PARATOR W/SHED	. GAS
	DRIVEN METHONAL PUMP. FIRES RUNNING ON CASIN	G GAS.	
Insp	ector: DENNIS L INGRAM Date:	12/28/94	

CONE MOUNTAIN PRODUCTION CO